

ANNOTATED CHECK-LIST OF VASCULAR PLANTS  
OF SAGEHEN CREEK DRAINAGE BASIN,  
NEVADA COUNTY, CALIFORNIA

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Subsequent to the establishment of the University of California's Sagehen Creek Field Station in 1951, the Sagehen Creek Drainage Basin has been the site of numerous research projects. These research projects have yielded more than 50 scientific publications (Leopold, 1971). However, only two of these papers—a study of bogs (Rae, 1970) and a study of conifer regeneration following burns (Bock and Bock, 1969)—have been concerned with vegetation, the bulk of the investigations having been directed towards studies of animals. The lack of an inventory of vascular plants has severely hampered efforts to obtain a broader understanding of the relationships of plants and animals in this region. The present check-list, therefore, is an attempt to compile an annotated catalogue of vascular plants that will be useful in future research and teaching activities at the Sagehen Creek Field Station and in other localities of the northern Sierra Nevada in which there are similar environmental conditions.

The Sagehen Creek Drainage Basin is located in northeastern Nevada County, California, and is here defined as the roughly oval shaped upper Sagehen Creek valley, extending westerly from the point at which California State Highway 89 crosses Sagehen Creek to Carpenter Ridge (fig. 1); it is approximately 8.9 km long and averages about 4.8 km in width. Thus, the area comprising the Sagehen Creek Drainage Basin lies between meridians  $120^{\circ} 12'$  and  $120^{\circ} 20'$  west longitude and between parallels  $39^{\circ} 24'$  and  $39^{\circ} 27'$  north latitude. The elevation of this area ranges from 1874 m at State Highway 89 to approximately 2680 m at the summit of Carpenter Ridge.

Various studies of the geology of this region, including those of Axelrod (1962), Birkeland (1963, 1964), and Lindgren (1897) have revealed that the bed-rock is granodiorite of Jurassic or Cretaceous age. The bed-rock is overlain by andesite, the parent soil material, of Pliocene or Miocene age, with glacial moraine interspersed with Pleistocene alluvium. Glacial moraine occurs along Sagehen Creek from its headwaters almost to the Field Station and north to Independence Lake. Pleistocene alluvium occurs along the creek in a 3.2 km long strip, approximately 1.6 km upstream from the Field Station, and, together with stream terraces, downstream from the Field Station to the confluence of Sagehen Creek with the Little Truckee River. The ridges comprising the north bound-

ary of Sagehen Creek Drainage Basin consist primarily of andesite with occasional outcroppings of a coarse basaltic rock, olivine-diorite (Lindgren, 1897); however, the Sagehen Hills, which represent the southern boundary, are composed of andesite devoid of these outcroppings.

The climate is characterized by dry, warm summers with occasional thunder showers and by winters with heavy snowfalls. Since water derived from rain and heavy snowfall penetrates the porous volcanic rocks and collects on the impervious bed-rock, numerous springs of superficial origin are present. The largest springs occur at the bases of andesitic hills where, at ground level, the volcanic rocks and bed-rock come in contact. This spring water, from slightly acidic soils, is mainly a dilute solution of bicarbonates of calcium, magnesium, and sodium and generally has pH values in the range of 7.2 to 7.8. Due to the origin of the water, spring-fed streamlets contributing to the creek are characterized by a constant flow of water of rather low temperatures (Johnson and Needham, 1966).

The drainage basin is administered by the Tahoe National Forest and the disturbance of native vegetation is limited to grazing by sheep and to recreational activities of man during the summer. Thus, the vegetation is less disturbed than in adjacent valleys.

In general, the habitats present in the area include the wet banks of Sagehen Creek and its streamlet tributaries, "hanging" bogs, and moist meadows at lower elevations and dry, rocky meadows at higher elevations interspersed among mixed coniferous forest associations. These forest associations range from lodgepole-Jeffrey pine associations at lower elevations to red fir-western white pine associations at higher elevations. The principal landmarks are shown in Figure 1.

The following catalogue of plants has been compiled over the last seven years, primarily from the collections of the staff and students at the Sagehen Creek Field Station, and does not purport to be complete, as is indicated by the appended list of observations. Nevertheless, the specimens deposited in the Sagehen Creek Field Station Herbarium represent 438 taxa. These specimens include members of 349 species and 89 infra-specific taxa, representing 60 families and 217 genera. With few exceptions, nomenclature follows that of Munz (1959) and the arrangement of plant families is alphabetical.

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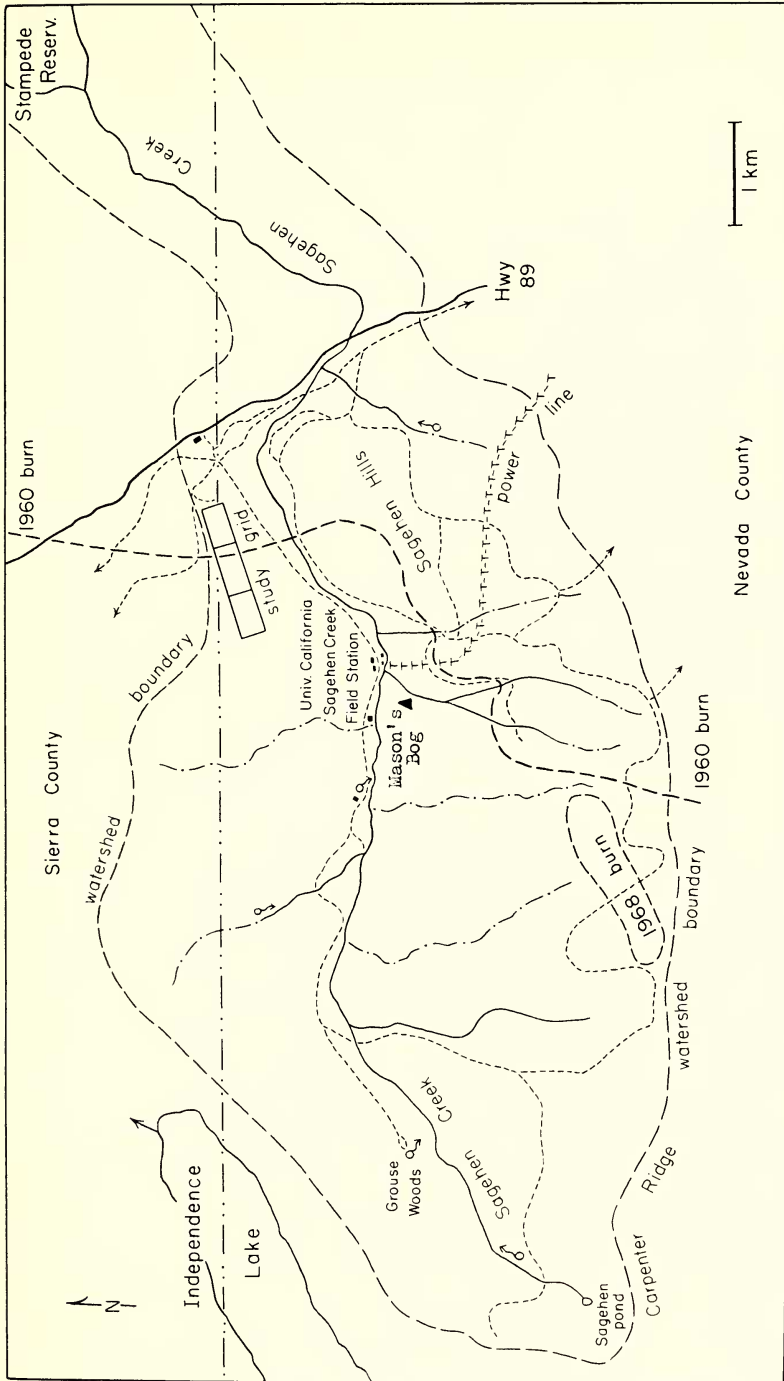


FIG. 1. Principal landmarks of the Sagehen Creek Drainage Basin.

## CATALOGUE OF PLANTS

## AMARYLLIDACEAE. Amaryllis Family

- Allium bisceptrum* Wats. Patis Onion. Infrequent; meadows and dry slopes.  
*A. campanulatum* Wats. Sierra Onion. Common; dry slopes and open areas in woods.  
*A. validum* Wats. Swamp Onion. Frequent; bogs and marshy areas near streamlets.  
*Brodiaea gracilis* Wats. Slender Brodiaea. Frequent; dry open slopes.  
*B. hyacinthina* (Lindl.) Baker. White Brodiaea. Frequent; dry open areas.  
*B. lutea* (Lindl.) Mort. var. *analina* (Greene) Munz. Golden Brodiaea, Pretty Face. Infrequent; dry meadows and open areas in woods.

## APOCYNACEAE. Dogbane Family

- Apocynum pumilum* (Gray) Greene. Mountain Dogbane. Frequent; exposed rocky slopes.

## ASCLEPIADACEAE. Milkweed Family

- Asclepias fascicularis* Dcne. Narrow-leaved Milkweed. Rare; exposed rocky slopes.

## ASPIDIACEAE. Shield Fern Family

- Cystopteris fragilis* (L.) Bernh. Brittle Fern. Infrequent; moist soil of headwaters of Sagehen Creek.

## BETULACEAE. Birch Family

- Alnus tenuifolia* Nutt. Mountain Alder, Thin-leaved Alder. Frequent; along Sagehen Creek.

## BORAGINACEAE. Borage Family

- Cryptantha affinis* (Gray) Greene. Common Cryptantha. Common; dry slopes and in woods.  
*C. simulans* Greene. Pine Cryptantha. Infrequent; dry slopes and open places in woods.  
*Cynoglossum occidentale* Gray. Western Hound's Tongue. Frequent; open places in woods.  
*Hackelia californica* (Gray) Jtn. California Stickseed. Infrequent; gravelly slopes and open places in woods.  
*H. floribunda* (Lehm.) Jtn. Many-flowered Stickseed. Frequent; shaded slopes and edges of woods.  
*H. micrantha* (Eastw.) J. L. Gentry. Little-flowered Stickseed. Infrequent; moist shaded slopes in woods.

- Plagiobothrys hispidulus* (Greene) Jtn. Harsh Plagiobothrys. Frequent; moist meadows.
- P. hispidus* Gray. Bristly Popcorn Flower. Infrequent; dry gravelly slopes.
- P. tener* (Greene) Jtn. Slender Allocarya. Infrequent; moist lower meadows.

## CAPRIFOLIACEAE. Honeysuckle Family

- Lonicera cauriana* Fern. Blue Fly Honeysuckle. Rare; moist shaded banks of Sagehen Creek at lower elevations.
- L. conjugialis* Kell. Double Honeysuckle. Rare; wooded slopes near Sagehen Creek.
- L. involucrata* (Richards.) Banks ex Spreng. Black Twin-berry. Infrequent; near bogs and edges of Sagehen Creek.
- Sambucus caerulea* Raf. Blue Elderberry. Infrequent; brushy slopes.
- S. microbotrys* Rydb. Mountain Red Elderberry. Infrequent; moist meadows on higher slopes.
- Symphoricarpos acutus* (Gray) Dieck. Sharp Snowberry. Infrequent; open rocky slopes.
- S. vaccinioides* Rydb. Mountain Snowberry. Infrequent; exposed rocky slopes.

## CARYOPHYLLACEAE. Pink Family

- Arenaria congesta* Nutt. ex T. & G. Capitata Sandwort. Frequent; dry rocky slopes.
- A. Kingii* (Wats.) Jones var. *glabrescens* (Wats.) Maguire. King's Sandwort. Infrequent; Carpenter Ridge and higher rocky slopes.
- A. Nuttallii* Pax ssp. *gracilis* (Gray) Maguire. Nuttall's Slender Sandwort. Infrequent; higher rocky slopes and Carpenter Ridge.
- Cerastium vulgatum* L. Larger Mouse-ear Chickweed. Frequent; moist meadows.
- Sagina saginoides* (L.) Karst. var. *hesperia* Fern. Arctic Pearlwort. Infrequent; moist meadows.
- Silene Douglasii* Hook. Douglas's Campion. Frequent; dry rocky areas on lower slopes.
- S. invisa* Hitchc. & Maguire. Unseen Campion. Infrequent; higher meadows and Carpenter Ridge.
- S. Menziesii* Hook. Menzies's Campion. Infrequent; dry rocky areas on lower slopes.
- S. montana* Wats. Mountain Campion. Infrequent; dry rocky areas on lower slopes.
- Spergularia rubra* (L.) J. & C. Presl. Purple Sand Spurry. Rare; in disturbed areas.
- Stellaria calycantha* (Ledeb.) Bong. ssp. *interior* Hult. Interior Starwort. Infrequent; moist meadows.
- S. longipes* Goldie. Long-stalked Starwort. Frequent; moist meadows.

## CHENOPODIACEAE. Goosefoot Family

- Chenopodium album* L. Pigweed, Lamb's Quarters. Infrequent; disturbed areas.
- C. Berlandieri* Moq. var. *Zschackei* (Murr.) Murr. Zschack's Pitseed Goosefoot. Rare; disturbed areas near Field Station.
- C. incognitum* H. A. Wahl. Disguised Chenopodium. Infrequent; disturbed areas near Sagehen Creek.
- Monolepis Nuttalliana* (Schult.) Greene. Nuttall's Monolepis. Infrequent; dry areas on lower slopes.

## COMPOSITAE. Sunflower Family

- Achillea lanulosa* Nutt. Yarrow. Abundant; meadows and slopes in woods.
- Antennaria rosea* Greene. Rosy Everlasting. Frequent; meadows and shaded places in woods.
- Arnica Chamissonis* Less. ssp. *foliosa* (Nutt.) Maguire. Leafy Meadow Arnica. Frequent; moist meadows and near springs and streamlets.
- A. discoidea* Benth. var. *alata* (Rydb.) Cronq. Winged Rayless Arnica. Common; open places in woods and near Sagehen Creek.
- Artemisia tridentata* Nutt. Basin Sagebrush. Common; exposed slopes and edges of woods.
- Aster adscendens* Lindl. Long-leaved Aster. Infrequent; meadows.
- A. alpigenus* (T. & G.) Gray ssp. *Andersonii* (Gray) Onno. Anderson's Aster. Frequent; bogs and moist meadows.
- A. integrifolius* Nutt. Entire-leaved Aster. Infrequent; edges of dry meadows and in woods.
- A. occidentalis* (Nutt.) T. & G. Western Mountain Aster. Common; moist meadows and edges of woods.
- Balsamorhiza sagittata* (Pursh) Nutt. Arrow-leaved Balsamroot. Infrequent; meads and exposed slopes.
- Chaenactis Douglasii* (Hook.) H. & A. Hoary Chaenactis. Frequent; exposed gravelly slopes.
- Cirsium Andersonii* (Gray) Petr. Anderson's Thistle. Infrequent; exposed gravelly slopes.
- C. Coulteri* Harv. & Gray. Coulter's Thistle. Infrequent; exposed rocky slopes.
- C. Drummondii* T. & G. var. *acaulescens* (Gray) Macbr. Dwarf Thistle. Common; meadows and shaded places in woods.
- Crepis intermedia* Gray. Intermediate Hawksbeard. Infrequent; dry slopes and meadows.
- Erigeron Coulteri* Porter. Coulter's Daisy. Frequent; moist meadows and near Sagehen Creek.
- E. peregrinus* (Pursh) Greene ssp. *callianthemus* (Greene) Cronq. var. *angustifolius* (Gray) Cronq. Wandering Daisy. Infrequent; meadows.
- Eriophyllum lanatum* (Pursh) Forbes var. *integrifolium* (Hook.) Smiley.

- Entire-leaved Eriophyllum. Frequent; dry rocky slopes and open places in woods.
- Eupatorium occidentale* Hook. Western Eupatorium. Infrequent; rocky slopes and drying meadows.
- Gnaphalium palustre* Nutt. Lowland Cudweed. Frequent; damp meadows.
- G. thermale* Nels. Slender Cudweed. Infrequent; meadows.
- Haplopappus Bloomeri* Gray. Bloomer's Haplopappus. Infrequent; rocky slopes along edges of woods.
- Helianthella californica* Gray var. *nevadensis* (Greene) Jeps. Sierra Helianthella. Infrequent; meadows and dry slopes.
- Hieracium albiflorum* Hook. White-flowered Hawkweed. Frequent; meadows and edges of woods.
- Madia glomerata* Hook. Mountain Tarweed. Common; meadows and open places in woods.
- M. minima* (Gray) Keck. Least Tarweed. Infrequent; dry gravelly slopes in woods.
- Microseris nutans* (Hook.) Sch.-Bip. Nodding Scorzonella. Frequent; rocky slopes in woods.
- Psilocarphus brevissimus* Nutt. var. *brevissimus*. Dwarf Woolly-heads. Infrequent; drying lower meadows.
- Senecio integerrimus* Nutt. var. *exaltatus* (Nutt.) Cronq. Single-stemmed Butterweed. Common; meadows and dry slopes in woods.
- S. pauciflorus* Pursh. Rayless Alpine Butterweed. Frequent; moist areas in meadows and woods.
- S. pauciflorus* Pursh var. *jucundulus* Jeps. Streambank Butterweed. Infrequent; wet meadows and along banks of Sagehen Creek.
- S. triangularis* Hook. Arrowhead Butterweed. Frequent; moist meadows and banks of streamlets.
- Solidago canadensis* L. ssp. *elongata* (Nutt.) Keck. Meadow Goldenrod. Infrequent; moist meadows and shaded places in woods.
- Stephanomeria lactucina* Gray. Large-flowered Stephanomeria. Infrequent; open sandy places in woods on lower slopes.
- Taraxacum officinale* Weber. Common Dandelion. Common; meadows and moist places in woods.
- Tragopogon dubius* Scop. Yellow Salsify. Frequent; disturbed areas near Field Station and along roads.
- Wyethia mollis* Gray. Mountain Mule-ears. Common; dry meadows and exposed slopes in woods.

CONVOLVULACEAE. Morning-Glory Family

- Convolvulus arvensis* L. Bindweed. Rare; disturbed areas along roads.

CORNACEAE. Dogwood Family

- Cornus stolonifera* Michx. American Dogwood. Rare; edge of Sagehen Creek.

## CRUCIFERAE. Mustard Family

- Arabis glabra* (L.) Bernh. Tower-Mustard. Frequent; dry open areas of lower slopes.
- A. Holboellii* Hornem. var. *pinetorum* (Tides.) Roll. Holboell's Rock-  
cress. Frequent; dry open areas on lower slopes.
- A. Holboellii* Hornem. var. *retrofracta* (Grah.) Rydb. Infrequent; dry  
rocky areas on lower slopes.
- A. Lyallii* Wats. Lyall's Rock-cress. Infrequent; gravelly soils of  
Carpenter Ridge and higher slopes.
- A. platysperma* Gray. Broad-seeded Rock-cress. Infrequent; higher  
dry slopes and Carpenter Ridge.
- Barbarea orthoceras* Ledeb. American Winter-cress. Frequent; moist  
meadows.
- Capsella Bursa-pastoris* (L.) Medic. Shepherd's-Purse. Infrequent; dis-  
turbed areas near Field Station.
- Cardamine Breweri* Wats. Brewer's Bitter-cress. Frequent; bogs and  
along streamlets.
- Descurania Richardsonii* (Sweet) O. E. Schulz ssp. *incisa* (Engelm.)  
Detl. Infrequent; disturbed areas on lower slopes.
- D. Richardsonii* (Sweet) O. E. Schulz ssp. *viscosa* (Rydb.) Detl.  
Mountain Tansy-mustard. Infrequent; moist shaded areas on lower  
slopes.
- Draba stenoloba* Ledeb. var. *nana* (O. E. Schulz) C. L. Hitchc. Alaska  
Whitlow-grass. Infrequent; moist meadows and along streamlets.
- D. stenoloba* Ledeb. var. *ramosa* C. L. Hitchc. Infrequent; shaded  
areas and in woods.
- Erysimum perenne* (Wats. ex Cov.) Abrams. Sierra Wallflower. Infre-  
quent; disturbed areas and open rocky places.
- Ledipidum virginicum* L. var. *pubescens* (Greene) C. L. Hitchc. Downy  
Pepper-grass. Infrequent; dry open areas.
- Nasturtium microphyllum* Boenn. ex Rchb. Small-leaved Water-cress.  
Infrequent; along streamlets.
- N. officinale* R. Br. Water-cress. Frequent; in running water of small  
streamlets.
- Raphanus sativus* L. Wild Radish. Infrequent; disturbed areas near Field  
Station.
- Rorippa curvisiliqua* (Hook.) Bessey. Western Yellow-cress. Frequent;  
moist meadows.
- Sisymbrium altissimum* L. Tumble-Mustard. Infrequent; disturbed areas  
along roads.
- Streptanthus tortuosus* Kell. Mountain Streptanthus. Infrequent; dis-  
turbed areas on lower dry slopes.
- Thlaspi arvense* L. Field Penny-cress. Rare; meadows near Field Station.

## CUPRESSACEAE. Cypress Family

- Calocedrus decurrens* (Torr.) Florin. Incense-cedar. Rare; higher dry



slopes.

*Juniperus occidentalis* Hook. Western Juniper. Very rare; dry slopes.

CUSCUTACEAE. Dodder Family.

*Cuscuta californica* Choisy. California Dodder. Infrequent; meadows.

CYPERACEAE. Sedge Family

*Carex aquatilis* Wahl. Water Sedge. Common; bogs and edges of Sagehen Creek.

*C. arctogena* H. Sm. Water Sedge. Common; bogs and edges of Sagehen Creek.

*C. athrostachya* Olney. Slender-beaked Sedge. Frequent; wet meadows.

*C. aurea* Nutt. Golden-fruited Sedge. Infrequent; boggy areas and edges of streamlets.

*C. capitata* L. Capitata Sedge. Frequent; damp meadows and along streamlets in woods.

*C. Cusickii* Mkze. Cusick's Sedge. Common; marshy areas and edges of streamlets.

*C. disperma* Dewey. Soft-leaved Sedge. Infrequent; in woods along streamlets.

*C. Douglasii* W. Boott. Douglas's Sedge. Abundant; open, dry meadows.

*C. eurycarpa* Holm. Well-fruited Sedge. Common; bogs and damp meadows.

*C. heteroneura* W. Boott. Various-nerved Sedge. Frequent; dry soils in woods.

*C. integra* Mkze. Smooth-beaked Sedge. Infrequent; damp meadows.

*C. Jonesii* Bailey. Jones's Sedge. Common; meadows.

*C. Kelloggii* W. Boott. Kellogg's Sedge. Common; bogs and adjacent to streamlets in meadows.

*C. lanuginosa* Michx. Woolly Sedge. Common; wet meadows.

*C. limosa* L. Shore Sedge. Frequent; bogs.

*C. multicosata* Mkze. Many-ribbed Sedge. Common; damp meadows.

*C. rostrata* Stokes. Beaked Sedge. Infrequent; wet meadows.

*C. simulata* Mkze. Short-beaked Sedge. Abundant; bogs and damp meadows.

*C. teneraeformis* Mkze. Sierra Slender Sedge. Infrequent; marshy areas.

*C. vernacula* Bailey. Vernacular Sedge, Native Sedge. Frequent; bogs.

*C. vesicaria* L. Inflated Sedge. Common; bogs and damp meadows.

*C. Whitneyi* Olney. Whitney's Sedge. Infrequent; wet meadows.

*Eriophorum gracile* Koch. Slender Cotton-grass. Abundant; bogs.

*Heleocharis quinqueflora* (Hartm.) Schwarz. Five-flowered Spike-rush. Frequent; bogs.

*Scirpus microcarpus* Presl. Small-fruited Bulrush. Infrequent; damp meadows.

## DROSERACEAE. Sundew Family

*Drosera anglica* Huds. Oblong-leaved Sundew. Common; bogs.

*D. rotundifolia* L. Round-leaved Sundew. Common; bogs.

## EQUISETACEAE. Horstail Family.

*Equisetum arvense* L. Common Horsetail. Frequent; along Sagehen Creek and streamlet tributaries.

*E. laevigatum* A. Br. Braun's Scouring-rush. Common; bogs and streamlets.

## ERICACEAE. Heath Family

*Arctostaphylos nevadensis* Gray. Pinemat Manzanita. Frequent; exposed slopes and in woods.

*A. patula* Greene. Green-leaved Manzanita. Common; exposed slopes and in woods.

*Sarcodes sanguinea* Torr. Snow Plant. Infrequent; rocky slopes in woods.

*Vaccinium occidentale* Gray. Western Blueberry, Western Huckleberry. Frequent; edges of bogs.

## EUPHORBIACEAE. Spurge Family

*Euphorbia serpyllifolia* Pers. Thyme-leaved Spurge. Rare; disturbed areas along roads.

## FAGACEAE. Beech Family

*Castanopsis sempervirens* (Kell.) Dudl. Bush Chinquapin, Sierra Chinquapin. Infrequent; among mixed conifers on middle and upper slopes.

*Quercus vaccinifolia* Kell. Huckleberry Oak. Infrequent; among mixed conifers on open rocky slopes.

## FUMARIACEAE. Fumitory Family

*Dicentra uniflora* Kell. Steer's Head. Infrequent; gravelly soil of Carpenter Ridge and higher slopes.

## GENTIANACEAE. Gentian Family

*Gentiana Amarella* L. Northern Gentian. Infrequent; banks of Sagehen Creek.

*G. Newberryi* Gray. Alpine Gentian. Infrequent; moist meadows and banks of Sagehen Creek.

*G. simplex* Gray. Hiker's Gentian. Frequent; moist meadows.

## GRAMINEAE. Grass Family

*Agropyron Parishii* Scribn. & Sm. Parish's Wheat-grass. Frequent; dry slopes and meadows.

*A. trachycaulum* (Link) Malte. Slender Wheat-grass. Common; meadows.

- Agrostis exarata* Trin. Western Bent-grass. Common; meadows.  
*A. idahoensis* Nash. Idaho Bent-grass. Common; meadows.  
*A. scabra* Willd. Rough Hair-grass, Tickle-grass. Frequent; meadows.  
*Alopecurus aequalis* Sobol. Little Meadow-foxtail. Infrequent; meadows.  
*Bromus ciliatus* L. Fringed Brome. Frequent; dry soils at edges of meadows.  
*B. marginatus* Nees. Large Mountain Brome-grass. Common; meadows and dry slopes.  
*B. Orcuttianus* Vasey. Orcutt's Brome-grass. Frequent; dry soils.  
*B. tectorum* L. Cheat Grass, Downy Cheat. Abundant; dry soils.  
*B. tectorum* L. var. *glabratus* Spenner. Infrequent; dry slopes.  
*Dactylis glomerata* L. Orchard Grass. Common; meadows.  
*Deschampsia caespitosa* (L.) Beauv. Tufted Hair-grass. Common; meadows and damp soils.  
*D. danthonioides* (Trin.) Munro ex Benth. Annual Hair-grass. Frequent; meadows.  
*D. elongata* (Hook.) Munro ex Benth. Slender Hair-grass. Abundant; meadows and slopes.  
*Elymus cinereus* Scribn. & Merr. Gray Rye-grass. Infrequent; meadows and dry slopes.  
*E. glaucus* Buckl. Western Rye-grass. Frequent; dry soils.  
*E. triticoides* Buckl. Alkali Rye-grass. Common; dry slopes.  
*Festuca rubra* L. Red Fescue. Infrequent; meadows.  
*Glyceria elata* (Nash) Hitchc. Tall Manna-grass. Infrequent; meadows.  
*G. pauciflora* Presl. Few-flowered Manna-grass. Infrequent; meadows.  
*G. striata* (Lam.) Hitchc. Fowl Meadow Grass. Frequent; meadows and damp soils.  
*Hordeum brachyantherum* Nevskii. Meadow Barley. Frequent; meadows.  
*H. jubatum* L. Foxtail. Common; dry slopes.  
*Melica bulbosa* Geyer ex Porter & Coult. Western Melica. Infrequent; meadows and moist soils.  
*M. fugax* Bol. var. *inexpansa* Suksd. Small Onion-grass. Rare; dry rocky soils.  
*M. fugax* Bol. var. *Macbridei* (Rowland) Beetle. Rare; dry rocky soils.  
*M. stricta* Bol. Nodding Melica. Infrequent; dry rocky slopes.  
*Muhlenbergia filiformis* (Thurb.) Rydb. Slender Muhlenbergia. Frequent; bogs and damp meadows.  
*Oryzopsis hymenoides* (R. & S.) Ricker. Sand Bunch Grass, Indian Mountain Rice. Infrequent; damp meadows.  
*Phleum alpinum* L. Mountain Timothy. Frequent; meadows.  
*P. pratense* L. Cultivated Timothy. Frequent; meadows and dry slopes.  
*Poa epilis* Scribn. Mountain Bluegrass. Abundant; meadows.  
*P. nervosa* (Hook.) Vasey. Hooker's Bluegrass. Infrequent; shaded slopes.

- P. nevadensis* Vasey ex Scribn. Nevada Bluegrass. Frequent; meadows and woods.
- P. Pringlei* Scribn. Pringle's Bluegrass. Infrequent; dry rocky slopes.
- P. Sandbergii* Vasey. Sandberg's Bluegrass. Infrequent; dry rocky slopes.
- P. scabrella* (Thurb.) Benth. ex Vasey. Malpais Bluegrass. Infrequent; dry soils.
- Sitanion Hystrix* (Nutt.) J. G. Sm. Bottlebrush Squirrel-tail. Frequent; meadows and dry slopes.
- Stipa Elmeri* Piper & Brodie ex Scribn. Elmer's Stipa. Infrequent; among mixed conifers on dry rocky slopes.

#### HYDROPHYLLACEAE. Waterleaf Family

- Hesperochiron pumilus* (Griseb.) Porter. Dwarf Hesperochiron. Rare; moist slopes and meadows.
- Hydrophyllum capitatum* Dougl. var. *alpinum* Wats. Alpine Woolen-breeches. Common; moist slopes and shaded places in woods.
- Nama Lobbii* Gray. Lobb's Nama. Infrequent; dry brushy areas previously burned.
- Nemophila parviflora* Dougl. ex Benth. var. *Austinae* (Eastw.) Brand. Austin's Small-flowered Nemophila. Infrequent; moist wooded areas on lower slopes.
- N. pedunculata* Dougl. ex Benth. Mountain Nemophila. Infrequent; moist wooded places on lower slopes.
- N. spatulata* Cov. Sierra Nemophila. Frequent; meadows and moist lower slopes.
- Phacelia hastata* Dougl. ex Lehm. Silver-leaf Phacelia. Common; dry rocky areas, (aff. *Phacelia mutabilis* Greene).
- P. humilis* T. & G. Low Phacelia. Common; dry gravelly slopes and edges of woods.
- P. hydrophyloides* Torr. ex Gray. Waterleaf Phacelia. Infrequent; gravelly slopes and open places in woods.

#### HYPERICACEAE. St. John's-wort Family

- Hypericum anagalloides* Cham. & Schlect. Tinker's Penny, Creeping St. John's-wort. Frequent; boggy areas and stream banks.
- H. formosum* HBK. var. *Scouleri* (Hook.) Coult. Scouler's St. John's-wort. Frequent; boggy areas and near springs.

#### IRIDACEAE. Iris Family

- Iris missouriensis* Nutt. Western Blue-flag. Frequent; dry meadows and open rocky areas in woods.
- Sisyrinchium idahoense* Bickn. Idaho Blue-eyed Grass. Infrequent; meadows and moist areas in woods.

## JUNCACEAE. Rush Family

- Juncus balticus* Willd. var. *montanus* Engelm. Baltic Rush. Common; meadows and along streamlets in woods.
- J. chlorocephalus* Engelm. Green-headed Rush. Infrequent; meadows and moist lower slopes.
- J. dubius* Engelm. Mariposa Rush. Infrequent; damp meadows and stream banks.
- J. longistylus* Torr. Long-styled Rush. Infrequent; moist meadows and stream banks.
- J. nevadensis* Wats. Sierra Rush. Common; bogs and damp shadows.
- J. orthophyllus* Cov. Straight-leaved Rush. Frequent; bogs and damp meadows.
- Luzula campestris* (L.) DC. Common Wood-rush. Frequent; stream banks and adjacent to streamlets in bogs.
- L. divaricata* S. Wats. Forked Wood-rush. Frequent; bogs.

## LABIATAE. Mint Family

- Mentha arvensis* L. Field Mint. Infrequent; along banks of Sagehen Creek at lower elevations.
- Monardella lanceolata* Gray. Mustang Mint. Infrequent; dry gravelly slopes.
- M. odoratissima* Benth. Mountain Monardella. Frequent; open rocky slopes and in woods.
- M. odoratissima* Benth. ssp. *pallida* (Heller) Epl. Pale Monardella. Common; exposed rocky slopes and in woods.
- Stachys rigida* Nutt. ex Benth. ssp. *rivularis* (Heller) Rpl. Brook Hedge Nettle. Frequent; moist open areas and along banks of Sagehen Creek.

## LEGUMINOSAE. Pea Family

- Lotus crassifolius* (Benth.) Greene. Thick-leaved Lotus. Infrequent; dry areas on lower slopes.
- L. Purshianus* (Benth.) Clem. & Clem. Pursh's Lotus. Frequent; open rocky areas on lower slopes.
- Lupinus Andersonii* Wats. var. *apertus* (Heller) C. P. Sm. Anderson's Lupine. Infrequent; rocky slopes and edges of woods.
- L. arbustus* Dougl. ssp. *calcaratus* (Heller) D. Dunn. Douglas's Spurred Lupine. Infrequent; meadows and open slopes.
- L. arbustus* Dougl. ssp. *silvicola* (Heller) D. Dunn. Infrequent; lower dry rocky slopes in woods.
- L. Breweri* Gray. Brewer's Lupine. Infrequent; open rocky slopes and on burned areas.
- L. caudatus* Kell. Kellogg's Spurred Lupine. Infrequent; among mixed conifers on dry lower slopes.

- L. Lyallii* Gray. Lyall's Lupine. Infrequent; Carpenter Ridge and higher rocky slopes.
- L. polyphyllus* Lindl. ssp. *superbus* (Heller) Munz. Superb Lupine. Frequent; bogs and moist shaded places.
- Trifolium Andersonii* Gray. Anderson's Clover. Infrequent; dry open areas on lower slopes.
- T. longipes* Nutt. Long-stalked Clover. Frequent; meadows and moist shaded places.
- T. monanthum* Gray. Carpet Clover. Infrequent; near springs.
- T. productum* Greene. Shasta Clover. Frequent; moist meadows and shaded places.
- T. Wormskioldii* Lehm. Wormskiold's Clover. Infrequent; moist meadows.

#### LEMNACEAE. Duckweed Family

- Lemna minima* Phil. Least Duckweed. Frequent; slow moving streamlets.
- L. trisulca* L. Ivy-leaved Duckweed. Frequent; slow moving streamlets.

#### LENTIBULARIACEAE. Bladderwort Family

- Utricularia vulgaris* L. Common Bladderwort. Rare; open water in Mason's Bog.

#### LILIACEAE. Lily Family

- Calochortus Leichtlinii* Hook. f. Leichtlin's Mariposa. Frequent; dry open areas.
- Camassia Quamash* (Pursh) Greene ssp. *breviflora* Gould. Short-flowered Camass. Abundant; meadows.
- Fritillaria atropurpurea* Nutt. Purple Fritillary. Frequent; dry slopes and open places in woods.
- Lilium parvum* Kell. Small Tiger Lily. Infrequent; damp shaded areas near springs and in meadows.
- Smilacina stellata* (L.) Desf. Star-flower. Frequent; damp meadows and near streamlets.
- Tofieldia glutinosa* (Michx.) Pers. ssp. *occidentalis* (Wats.) C. L. Hitchc. Western Tofieldia. Frequent; bogs.
- Veratrum californicum* Durand. Corn-Lily, Skunk-Cabbage. Common; shaded places in damp meadows.
- Zigadenus paniculatus* (Nutt.) Wats. Sand-corn, Panicked Zygadene. Frequent; dry places in meadows and woods.

#### LIMNANTHACEAE. False Mermaid Family

- Floerkea proserpinacoides* Willd. False Mermaid. Rare; moist meadows at lower elevations.

## LINACEAE. Flax Family

*Linum perenne* L. ssp. *Lewisii* (Pursh) Hult. Western Blue Flax. Infrequent; Carpenter Ridge and higher dry slopes and meadows.

## LOASACEAE. Loasa Family

*Mentzelia dispersa* Wats. Nada Stick-leaf. Very rare; dry disturbed places near Field Station.

## LORANTHACEAE. Mistletoe Family

*Arceuthobium americanum* Nutt. ex Engelm. American Dwarf Mistletoe. Infrequent; on *Pinus Murrayana* on lower slopes.

*A. campylopodum* Engelm. f. *abietinum* (Engelm.) Gill. Fir Dwarf Mistletoe. Infrequent; on *Abies magnifica* on higher slopes.

## MALVACEAE. Mallow Family

*Sidalcea glaucescens* Greene. Glaucous Sidalcea. Infrequent; burned and open places on lower slopes.

*S. oregana* (Nutt.) Gray ssp. *spicata* (Regel) Greene. Spiked sidalcea. Common; moist meadows.

## ONAGRACEAE. Evening-Primrose Family

*Camissonia andina* (Nutt.) Raven. Plateau Primrose. Infrequent; lower rocky slopes among sagebrush.

*C. subacaulis* (Pursh) Raven. Sun Cup. Common; meadows and open places in woods.

*Epilobium angustifolium* L. Fireweed. Infrequent; moist lower slopes and along Sagehen Creek.

*E. brevistylum* Barb. Slender Willow-herb. Frequent; moist meadows and bogs.

*E. glaberrimum* Barb. Glaucous Willow-herb. Infrequent; moist meadows and near streamlets.

*E. Halleianum* Hausskn. Hall's Willow-herb. Infrequent; along streamlets on higher slopes.

*E. obcordatum* Gray. Rock-fringe. Infrequent; higher slopes and Carpenter Ridge.

*E. oregonense* Hausskn. Oregon Willow-herb. Common; bogs and wet meadows near streamlets.

*E. paniculatum* Nutt. ex T. & G. Panicked Willow-herb. Rare; in disturbed places along roads.

*E. Pringleanum* Hausskn. Pringle's Willow-herb. Infrequent; moist areas and near springs.

*Gayophytum diffusum* T. & G. ssp. *parviflorum* Lewis & Szweykowski. Small-flowered Diffuse Gayophytum. Frequent; dry slopes and exposed places.

*G. heterozygum* Lewis & Szweykowski. Heterozygous Gayophytum. Infrequent; dry rocky places on lower slopes.

*Ludwigia palustris* (L.) Ell. American Marsh Purslane. Infrequent; bogs and wet meadows.

ORCHIDACEAE. Orchid Family

*Corallorhiza maculata* Raf. Spotted Coral-root. Rare; open places in woods above Mason's Bog.

*Habenaria dilatata* (Pursh) Hook. var. *leucostachys* (Lindl.) Ames. Sierra Rein-orchis, White-flowered Bog Orchid. Frequent; bogs and near springs.

*H. sparsiflora* Wats. Sparsely-flowered Bog Orchid. Infrequent; bogs and near springs.

*Spiranthes Romanzoffiana* Cham. & Schlecht. Hooded Ladies' Tresses. Common; bogs.

OROBANCHACEAE. Broom-rape Family

*Orobanche uniflora* L. Naked Broom-rape. Rare; on *Saxifraga* along streamlets in bogs.

*O. uniflora* L. var. *Sedi* (Suksd.) Achey. Rare; on *Artemisia* on dry lower slopes.

PAPAVERACEAE. Poppy Family

*Eschscholzia californica* Cham. California Poppy. Rare; disturbed places near Field Station.

PINACEAE. Pine Family

*Abies concolor* (Gord. & Glend.) Lindl. White Fir. Frequent; dry lower slopes.

*A. magnifica* A. Murr. Red Fir. Frequent; dry higher slopes.

*Pinus jeffreyi* Grev. & Balf. Jeffrey Pine. Common; dry lower slopes.

*P. lambertiana* Dougl. Sugar Pine. Infrequent; dry higher slopes.

*P. monticola* Dougl. Western White Pine. Frequent; dry higher slopes.

*P. murrayana* Grev. & Balf. Lodgepole Pine. Common; lower slopes and borders of meadows and bogs.

*Tsuga mertensiana* (Bong.) Carr. Mountain Hemlock. Frequent; dry higher slopes.

POLEMONIACEAE. Phlox Family

*Collomia grandiflora* Dougl. ex Lindl. Large-flowered Collomia. Frequent; open areas on rocky slopes.

*C. linearis* Nutt. Narrow-leaved Collomia. Frequent; meadows and open places.

*C. tinctoria* Kell. Yellow-staining Collomia. Infrequent; exposed rocky slopes.

*Gilia capillaris* Kell. Smooth-leaved Gilia. Frequent; dry slopes and meadows.

*G. leptalea* (Gray) Greene ssp. *bicolor* Mason & Grant. Two-colored



Bridges's Gilia. Common; dry slopes and meadows.

*Ipomopsis aggregata* (Pursh) V. Grant. Scarlet Gilia, Skyrocket. Frequent; exposed slopes and edges of woods.

*Leptodactylon pungens* (Torr.) Rydb. ssp. *Hookeri* (Dougl.) Wherry. Hooker's Granite Gilia. Rare; exposed brushy slopes.

*Linanthus ciliatus* (Benth.) Greene. Whisker-brush, Bristly-leaved Linanthus. Common; dry rocky slopes and open places.

*L. ciliatus* (Benth.) Greene var. *neglectus* (Greene) Jeps. Frequent; dry rocky slopes.

*L. Harknessii* (Curran) Greene. Harkness's Linanthus. Frequent; exposed rocky slopes.

*L. Harknessii* (Curran) Greene ssp. *condensatus* Mason. Infrequent; dry meadows and slopes.

*Microsteris gracilis* (Dougl. ex Hook.) Greene. Slender Phlox. Frequent; meadows and open places in woods.

*M. gracilis* (Dougl. ex Hook.) Greene ssp. *humilis* (Greene) V. Grant. Infrequent; moist meadows.

*Navarretia Breweri* (Gray) Greene. Brewer's Navarretia. Infrequent; dry meadows.

*N. divaricata* (Torr.) Greene. Mountain Navarretia. Frequent; open exposed areas and dry places in woods.

*N. propinqua* Suksd. Great Basin Navarretia. Common; moist meadows.

*N. subuligera* Greene. Awl-leaved Navarretia. Infrequent; dry rocky slopes.

*Phlox diffusa* Benth. Spreading Phlox. Frequent; exposed rocky slopes and open places in woods.

*Polemonium californicum* Eastw. Low Polemonium. Infrequent; shaded places on higher slopes and Carpenter Ridge.

*P. caeruleum* L. ssp. *occidentale* (Greene) J. F. Davids. Western Polemonium. Common; wet meadows and near springs and stream banks.

#### POLYGONACEAE. Buckwheat Family

*Eriogonum marifolium* T. & G. Marum-leaved Eriogonum. Infrequent; Carpenter Ridge and higher dry slopes.

*E. nudum* Dougl. ex Benth. Naked-stemmed Eriogonum, Tibinagua. Frequent; dry open areas on lower slopes.

*E. spergulinum* Gray. Spurry Eriogonum. Infrequent; road beds and disturbed places on lower slopes.

*E. umbellatum* Torr. var. *umbellatum*. Sulphur Flower. Frequent; dry open slopes.

*Oxyria digyna* (L.) Hill. Mountain Sorrel. Infrequent; higher rocky slopes and Carpenter Ridge.

*Polygonum aviculare* L. Common Knotweed. Frequent; lower slopes and disturbed places.

- P. bistortoides* Pursh. Western Bistort, Snakeweed. Common to locally abundant; wet meadows.
- P. Davisiae* Brew. ex Gray. Davis's Knotweed. Infrequent; higher dry slopes and Carpenter Ridge.
- P. Douglasii* Greene. Douglas's Knotweed. Infrequent; dry lower slopes.
- P. Kelloggii* Greene. Kellogg's Knotweed. Infrequent; dry areas on lower slopes.
- P. minimum* Wats. Leafy Dwarf Knotweed. Infrequent; wet areas near Sagehen Creek.
- P. natans* (Michx.) Eaton. American Water Persicaria, Water Smartweed. Rare; springs and edges of Sagehen Creek.
- P. phytolaccaefolium* Meissn. Alpine Knotweed. Infrequent; dry brushy slopes.
- P. shastense* Brew. ex Gray. Shasta Knotweed. Infrequent; higher dry slopes and Carpenter Ridge.
- P. spergulariaeforme* Meissn. Fall Knotweed, Spurry Knotweed. Frequent; disturbed dry places.
- Rumex paucifolius* Nutt. ex Wats. Alpine Sheep Sorrel. Infrequent; higher slopes and Carpenter Ridge.
- R. salicifolius* Weinm. Willow Dock. Frequent; dry meadows and open places on lower slopes.
- R. triangulivalvis* (Danser) Rech. f. var. *oreolapathum* Rech. f. Infrequent; wet meadows.

PORTULACACEAE. Purslane Family

- Calandrinia ciliata* (R. & P.) DC. var. *Menziesii* (Hook.) Macbr. Red Maids. Common; dry meadows and open areas on lower slopes.
- Calyptridium umbellatum* (Torr.) Greene. Pussy Paws. Common; dry open areas.
- C. umbellatum* (Torr.) Greene var. *caudiciferum* (Gray) Jeps. Infrequent; higher dry slopes and Carpenter Ridge.
- Lewisia nevadensis* (Gray) Rob. Nevada Lewisia. Infrequent; lower slopes in woods.
- L. triphylla* (Wats.) Rob. Three-leaved Lewisia. Infrequent; higher meadows and slopes and Carpenter Ridge.
- Montia Chamissoi* (Ledeb.) Dur. & Jacks. Toad-lily. Common; moist meadows.
- M. perfoliata* (Donn) Howell var. *depressa* (Gray) Jeps. Depressed Miner's-Lettuce. Frequent; shaded places in woods.

PRIMULACEAE. Primrose Family

- Dodecatheon Jeffreyi* Van Houtte. Jeffrey's Shooting Star. Common; moist meadows and bogs.
- Primula suffrutescens* Gray. Sierra Primrose. Infrequent; higher dry slopes and Carpenter Ridge.

## PTERIDACEAE. Bracken Family

- Cheilanthes gracillima* C. C. Eat. Lace Fern. Infrequent; rocky outcrops of lower dry slopes.
- Pteridium aquilinum* (L.) Kuhn var. *pubescens* Underw. Western Bracken. Common; south-facing slopes.

## PYROLACEAE. Wintergreen Family

- Allotropa virgata* T. & G. ex Gray. Sugar Stick. Frequent; ridges in woods.
- Chimaphila Menziesii* (R. Br. ex D. Don) Spreng. Little Prince's Pine, Pipsissewa. Infrequent; shaded slopes in woods.
- C. umbellata* (L.) Barton var. *occidentalis* (Rydb.) Blake. Western Prince's Pine. Infrequent; dry brushy slopes.
- Pterospora Andromedea* Nutt. Pinedrops. Frequent; shaded areas among pines.
- Pyrola californica* Krisa. Bog Wintergreen. Infrequent; edges of bogs.
- P. picta* Sm. White-veined Wintergreen, Shin-leaf. Infrequent; dry shaded areas among pines.
- P. picta* Sm. ssp. *dentata* (Sm.) Piper. Nootka Wintergreen. Common; lower dry slopes among pines.

## RANUNCULACEAE. Crowfoot Family

- Aconitum columbianum* Nutt. Columbia Monkshood. Common; damp shaded places near Sagehen Creek.
- Aquilegia formosa* Fisch. var. *truncata* (F. & M.) Jones. Columbine. Frequent; moist shaded places in woods.
- Caltha Howellii* (Huth) Greene. White Marsh-marigold. Frequent; boggy places in woods.
- Delphinium glaucum* Wats. Glaucous Rocky Mountain Larkspur. Infrequent; higher wet meadows and Carpenter Ridge.
- D. Nuttallianum* Pritz. ex Walp. Nuttall's Larkspur. Common; bogs and moist meadows.
- Myosurus aristatus* Benth. ssp. *montanus* (Campbell) Stone. Sedge Mouse-tail. Frequent; bogs and pools near springs.
- Paeonia Brownii* Dougl. ex Hook. Western Peony. Frequent; lower rocky slopes.
- Ranunculus alismaefolius* Geyer ex Benth. var. *Hartwegii* (Greene) Jeps. Water-plantain Buttercup. Frequent; moist meadows.
- R. alismaefolius* Geyer ex Benth. var. *Lemmonii* (Gray) L. Benson. Infrequent; near springs.
- R. aquatilis* L. var. *capillaceus* (Thuill.) DC. Water Buttercup. Frequent; in Sagehen Creek and streamlet tributaries.
- R. occidentalis* Nutt. var. *Eisenii* (Kell.) Gray. Eisen's Western Buttercup. Frequent; moist meadows.

- R. occidentalis* Nutt. var. *ultramontanus* Greene. Infrequent; adjacent to streamlets in meadows.
- R. orthorhynchus* Hook. Straight-beaked Buttercup. Infrequent; in meadows.
- R. uncinatus* D. Don. Hooked Buttercup. Infrequent; moist semi-shaded places in edges of woods.
- Thalictrum Fendleri* Engelm. ex Gray. Fendler's Meadow-Rue. Common; moist shaded places in edges of woods.
- T. sparsiflorum* Turcz. Few-flowered Meadow-Rue. Frequent; moist shaded places near Sagehen Creek.

#### RHAMNACEAE. Buckthorn Family

- Ceanothus prostratus* Benth. Squaw Carpet, Mahala Mats. Common; open areas among pines on rocky slopes.
- C. velutinus* Dougl. ex Hook. Tobacco Brush. Common; burned areas and open places on wooded rocky slopes.
- Rhamnus alnifolia* L'Her. Alder-leaved Coffeeberry. Rare; near springs.

#### ROSACEAE. Rose Family

- Amelanchier pumila* Nutt. Smooth Service-berry. Frequent; partly shaded lower slopes.
- Cercocarpus ledifolius* Nutt. Curl-leaved Mountain-mahogany. Infrequent; higher dry rocky slopes and Carpenter Ridge.
- Fragaria virginiana* L. ssp. *platypetala* Staudt. Broad-petaled Strawberry. Frequent; moist shaded places in woods.
- Geum macrophyllum* Willd. Large-leaved Avens. Frequent; moist meadows and banks of Sagehen Creek.
- Holodiscus microphyllus* Rydb. Small-leaved Rock-spiraea. Infrequent; dry rocky slopes.
- Horkelia fusca* Lindl. ssp. *pseudocapitata* (Rydb.) Keck. False-headed Dusky Horkelia. Infrequent; open areas and edges of woods.
- Ivesia sericoleuca* (Rydb.) Rydb. Plumas Ivesia. Frequent; meadows and dry slopes.
- I. unguiculata* Gray. Yosemite Ivesia. Frequent; meadows and edges of woods.
- Potentilla glandulosa* Lindl. ssp. *nevadensis* (Wats.) Keck. Sierra Sticky Cinquefoil. Common; meadows and open places in woods.
- P. gracilis* Dougl. ex Hook. ssp. *Nuttallii* (Lehm.) Keck. Nuttall's Cinquefoil. Frequent; meadows and edges of woods.
- Prunus emarginata* (Dougl.) Walp. Bitter Cherry. Frequent; open rocky slopes.
- Purshia tridentata* (Pursh) DC. Northern Antelope Brush, Bitter-brush. Common; dry rocky slopes.
- Rosa californica* Cham. & Schlecht. California Rose. Frequent; moist shaded places among conifers on lower slopes.

- R. Woodsii* Lindl. var. *ultramontana* (Wats.) Jeps. Interior Rose. Frequent; moist areas and edges of woods on lower slopes.
- Rubus parviflorus* Nutt. Thimbleberry. Rare; near springs.
- Spiraea densiflora* Nutt. ex T. & G. Rose-colored Meadow-sweet. Infrequent; higher rocky slopes and Carpenter Ridge.

## RUBIACEAE. Madder Family

- Galium bifolium* Wats. Low Mountain Bedstraw. Infrequent; in edges of woods and near disturbed places on lower slopes.
- G. Grayanum* Ehrend. Gray's Bedstraw. Infrequent; higher rocky slopes and Carpenter Ridge.
- G. mexicanum* HBK. var. *asperulum* (Gray) Dempster. Tall Rough Bedstraw. Infrequent; moist soils in woods and near Sagehen Creek.
- G. trifidum* L. var. *subbiflorum* Wieg. Trifid Bedstraw. Common; wet meadows and near Sagehen Creek.
- G. triflorum* Michx. Sweet-scented Bedstraw. Frequent; moist shaded places and near Sagehen Creek.
- Kelloggia galioides* Torr. Kelloggia. Frequent; dry shaded slopes in woods.

## SALICACEAE. Willow Family

- Populus tremuloides* Michx. Quaking Aspen. Frequent; along Sagehen Creek and near springs.
- P. trichocarpa* T. & G. Black Cottonwood. Very rare; single tree on Sagehen Creek, ca. 4.8 km west of Field Station.
- Salix argophylla* Nutt. Silver-leaved Willow. Infrequent; moist meadows and near streamlets.
- S. Geyeriana* Anderss. Geyer's Willow. Common; along Sagehen Creek.
- S. Geyeriana* Anderss. var. *argentea* (Bebb) C. K. Schneid. Silver Geyer's Willow. Infrequent; along Sagehen Creek.
- S. lasiandra* Benth. Red Willow. Frequent; along Sagehen Creek.
- S. lasiandra* Benth. var. *lancifolia* (Anderss.) Bebb. Lance-leaved Red Willow. Infrequent; along Sagehen Creek.
- S. Lemmonii* Bebb. Lemmon's Willow. Common; along Sagehen Creek and near springs.

## SAXIFRAGACEAE. Saxifrage Family

- Lithophragma glabrum* Nutt. Rock Star. Infrequent; moist shaded places in edges of woods.
- Mitella Breweri* Gray. Brewer's Miterwort. Infrequent; shaded places in edges of bogs.
- Parnassia palustris* L. var. *californica* Gray. California Grass-of-Parnassus. Infrequent; wet meadows.
- Ribes cereum* Dougl. White Squaw Currant. Frequent; dry exposed slopes.

- R. divaricatum* Dougl. var. *inermis* (Rydb.) McMinn. White-stemmed Gooseberry. Infrequent; moist shaded places on lower slopes.
- R. montigenum* McClat. Alpine Prickly Currant. Infrequent; dry places on higher slopes.
- R. nevadense* Kell. Sierra Nevada Currant. Infrequent; dry higher ridges and Carpenter Ridge.
- R. Roezlii* Regel. Sierra Gooseberry. Frequent; dry open slopes.
- R. viscosissimum* Pursh var. *Hallii* Jancz. Hall's Sticky Currant. Infrequent; moist shaded places and near springs.
- Saxifraga oregana* Howell. Bog Saxifrage. Common; bogs and moist meadows.
- S. odontoloma* Piper. Brook Saxifrage. Frequent; near streamlets in bogs and headwaters of Sagehen Creek.

SCROPHULARIACEAE. Figwort Family

- Castilleja Applegatei* Fern. Wavy-leaved Indian Paint-brush. Frequent; exposed dry rocky slopes.
- C. miniata* Dougl. ex Hook. Great Red Indian Paint-brush. Common; moist sandy areas near springs and Sagehen Creek.
- C. nana* Eastw. Dwarf Alpine Indian Paint-brush. Infrequent; exposed rocky places on higher slopes and Carpenter Ridge.
- C. pilosa* (Wats.) Rydb. Hairy Indian Paint-brush. Infrequent; gravelly slopes and edges of dry meadows.
- Collinsia parviflora* Dougl. ex Lindl. Small-flowered Blue-eyed Mary. Frequent; moist shaded places and near streamlets in meadows.
- C. Torreyi* Gray var. *Wrightii* (Wats.) Jtn. Wright's Blue-eyed Mary. Infrequent; exposed gravelly places on higher slopes.
- Gratiola ebracteata* Benth. Bractless Hedge-hyssop. Rare; disturbed places in lower wet meadows.
- Mimulus Breweri* (Greene) Cov. Brewer's Monkey-flower. Infrequent; drying meadows.
- M. guttatus* Fisch. ex DC. Common Large Monkey-flower. Common; bogs, wet meadows and banks of streamlets.
- M. moschatus* Dougl. ex Lindl. Musk Flower. Common; moist soil near springs and banks of streamlets.
- M. primuloides* Benth. Primrose Monkey-flower. Abundant; bogs and wet meadows.
- M. rubellus* Gray. Ciliolate-toothed Monkey-flower. Infrequent; sandy slopes near meadows.
- M. Suksdorfii* Gray. Suksdorf's Monkey-flower. Frequent; moist meadows.
- M. Tilingii* Regel. Larger Mountain Monkey-flower. Frequent; damp meadows and near streamlets.
- M. Torreyi* Gray. Torrey's Monkey-flower. Infrequent; partially shaded places in woods on lower slopes.

- Orthocarpus Copelandii* Eastw. var. *cryptanthus* (Piper) Keck. Infrequent; exposed dry slopes of higher ridges and Carpenter Ridge.
- O. hispidus* Benth. Hairy Orthocarpus. Common; meadows.
- Pedicularis attollens* Gray. Little Elephant's Head. Infrequent; moist areas of higher slopes and Carpenter Ridge.
- P. groenlandica* Retz. ssp. *surrecta* (Benth.) Piper. Raised Elephant's Head. Common; bogs, damp meadows and shaded places.
- P. semibarbata* Gray. Pine-woods Lousewort. Frequent; dry shaded slopes in woods.
- Penstemon deustus* Dougl. ex Lindl. Hot-rock Penstemon. Common; dry rocky slopes.
- P. gracilentus* Gray. Slender Penstemon. Common; dry rocky slopes and open places in woods.
- P. heterodoxus* Gray. Sierran Penstemon. Infrequent; higher dry slopes and Carpenter Ridge.
- P. laetus* Gray ssp. *Roetzlii* (Regel) Keck. Roetzl's Gay Penstemon. Frequent; rocky slopes in woods.
- P. Lemmonii* Gray. Bush Beard-tongue. Frequent; brushy rocky slopes.
- P. Newberryi* Gray. Mountain Pride. Infrequent; exposed higher rocky slopes and Carpenter Ridge.
- P. Rydbergii* A. Nels. Meadow Penstemon. Common; meadows.
- P. speciosus* Dougl. ex Lindl. Showy Penstemon. Frequent; exposed sandy slopes.
- P. speciosus* Dougl. ex Lindl. ssp. *Kennedyi* (A. Nels.) Keck. Kennedy's Penstemon. Infrequent; higher rocky slopes and Carpenter Ridge.
- Verbascum Thapsus* L. Common Mullein. Infrequent; brushy rocky slopes and near streamlets.
- Veronica americana* (Raf.) Schw. American Brooklime. Frequent; moist places and near banks of Sagehen Creek.
- V. peregrina* L. ssp. *xalapensis* (HBK.) Penn. Jalapa Speedwell. Infrequent; moist meadows.
- V. serpyllifolia* L. var. *humifusa* (Dickson) Vahl. Low Thyme-leaved Speedwell. Common; banks of streamlets and moist places in woods.

## SOLANACEAE. Nightshade Family

- Chamaesaracha nana* (Gray) Gray. Dwarf Chamaesaracha. Frequent; dry exposed sandy places.

## UMBELLIFERAE. Carrot Family

- Angelica Breweri* Gray. Brewer's Angelica. Infrequent; exposed rocky slopes.
- Heracleum lanatum* Michx. Cow-parsnip. Infrequent; moist slopes and shaded places.

- Ligusticum Grayi* Coult. & Rose. Gray's Lovage. Frequent; moist slopes and areas along Sagehen Creek.
- Lomatium dissectum* (Nutt.) Math. & Const. Fern-leaved Lomatium. Infrequent; in edges of woods on rocky lower slopes.
- Osmorhiza chilensis* H. & A. Mountain Sweet-cicely. Infrequent; moist shaded places along streamlets.
- O. occidentalis* (Nutt.) Torr. Western Sweet-cicely. Frequent; woods and shaded places along Sagehen Creek.
- Perideridia Bolanderi* (Gray) Nels. & Macbr. Bolander's Yampah. Frequent; meadows and exposed slopes.
- P. Lemmonii* (Coult. & Rose) Chuang & Const. Lemmon's Yampah. Infrequent; meadows and exposed slopes at edges of woods.
- Pteryxia terebinthina* (Hook.) Coult. & Rose var. *californica* (Coult. & Rose) Math. California Pteryxia. Carpenter Ridge and high exposed ridges.
- Sanicula graveolens* Poepp. ex DC. Sierra Sanicle. Rare; open woods near streamlets.
- Sphenosciadium capitellatum* Gray. Ranger's Button, Swamp Whiteheads. Common; near springs and along Sagehen Creek.

## VALERIANACEAE. Valerian Family

- Valeriana capitata* Pall. ex Link ssp. *californica* (Heller) F. G. Meyer. California Valerian. Frequent; moist meadows, streamlet banks, and shaded places in woods.

## VIOLACEAE. Violet Family

- Viola adunca*. Sm. Western Dog Violet. Infrequent; moist slopes.
- V. Macloskeyi* Lloyd. Macloskey's Violet. Frequent; moist places in woods and along banks of Sagehen Creek.
- V. purpurea* Kell. ssp. *integrifolia* Baker & Clausen. Frequent; exposed slopes and edges of woods.
- V. purpurea* Kell. ssp. *mesophyta* Baker & Clausen. Infrequent; dry slopes and edges of woods.

PLANTS REPORTEDLY OBSERVED IN THE SAGEHEN CREEK  
DRAINAGE BASIN BUT NOT COLLECTED

- Agoseris glauca* (Pursh) Greene var. *laciniata* (D. C. Eat.) Smiley.
- Aquilegia formosa* Fisch. var. *pauciflora* (Greene) Boothman.
- Arabis Davidsonii* Greene.
- Arnica cordifolia* Hook.
- Artemisia Douglasiana* Bess.
- A. ludoviciana* Nutt. ssp. *incompta* (Nutt.) Keck.
- Calochortus Nuttallii* Torr.
- Calycadenia mollis* Gray.
- Carex filifolia* Nutt.



- Chrysothamnus viscidiflorus* (Hook.) Nutt. ssp. *pumilus* (Nutt.) Hall & Clem.
- Cryptantha pterocarya* (Torr.) Greene.  
*C. Torreyana* (Gray) Greene.
- Dodecatheon alpinum* (Gray) Greene.
- Epilobium anagallidifolium* Lam.  
*E. exaltatum* E. Drew.
- Gayophytum ramosissimum* T. & G.
- Helenium Hoopesii* Gray.
- Ivesia Gordonii* (Hook.) T. & G.
- Juncus macrandrus* Cov.
- Lemna gibba* L.
- Lupinus meionanthus* Gray.  
*L. sellulus* Kell.
- Matricaria matricarioides* (Less.) Porter.
- Perideridia Gairdneri* (H. & A.) Math.
- Phacelia curvipes* Torr. ex Wats.  
*P. heterophylla* Pursh ssp. *virgata* (Greene) Heckard.
- Pinus ponderosa* Dougl. ex P. C. Lawson.
- Poa Hansenii* Scribn.
- Prunus virginiana* L. var. *demissa* (Nutt.) Torr.
- Quercus chrysolepis* Liebm. var. *nana* (Jeps.) Jeps.
- Salix lutea* Nutt.
- Sambucus melanocarpa* Gray.
- Scirpus criniger* Gray.
- Silene Lemmonii* Wats.
- Stachys albens* Gray.
- Trifolium cyathiferum* Lindl.
- Veronica arvensis* L.

## LITERATURE CITED

- AXELROD, D. I. 1962. Post-Pliocene uplift of the Sierra Nevada, California. *Geol. Soc. Amer. Bull.* 73:183-198.
- BIRKELAND, P. W. 1963. Pleistocene volcanism and deformation of the Truckee area, north of Lake Tahoe, California. *Geol. Soc. Amer. Bull.* 74:1453-1464.
- . 1964. Pleistocene glaciation of the northern Sierra Nevada, north of Lake Tahoe, California. *Jour. Geol.* 72:810-824.
- BOCK, J. H. and C. E. BOCK. 1969. Natural reforestation in the northern Sierra Nevada-Donner Ridge burn. *Tall Timbers Fire Ecology Conf. Proc.* 9:119-126.
- JOHNSON, C. M. and P. R. NEEDHAM. 1966. Ionic composition of Sagehen Creek, California, following an adjacent fire. *Ecology* 47:636-639.
- LEOPOLD, A. S. 1971. Sagehen Creek Field Station: the first twenty years. *School of Forestry and Conservation, Univ. Calif., Berkeley.*
- LINDGREN, W. 1897. Description of the Truckee quadrangle, California. *U. S. Geol. Survey Geol. Atlas, Folio* 39.
- MUNZ, P. A. 1959. *A California flora.* Univ. Calif. Press, Berkeley.
- RAE, S. P. 1970. *Studies in the ecology of Mason's Bog, Sagehen Creek, California.* Unpublished M. A. thesis, Univ. Calif., Davis.